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## Agricultural Extension as Affected by Recent Economic Trends

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## AGRICULTURAL EXTENSION AS AFFECTED BY RECENT ECONOMIC TRENDS\*

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EXPERIMENT STATION FILE

New economic frontiers are constantly being created in agriculture. These frontiers we must recognize if agricultural extension is to keep in the lead in agricultural progress. But we must do more than that. We must adapt our programs to take full advantage of the forces that are bringing about changes in the agriculture of the United States. It rests with the cooperative extension service to take into serious account economic trends and to anticipate their effects on agricultural development. Unless we do take into full reckoning the economic trends of the time in shaping our program for agricultural extension, we can not expect to render the forward-looking and efficient service in agriculture that is expected of us.

There are, of course, a very considerable number of economic factors which have a bearing on adjustments in the extension program and to which consideration might be given in a complete discussion of their effect on agriculture. I shall confine this discussion of economic trends and their effect on extension development, however, to those which appear likely to have the most definite effect on extension work. These, to my mind, are the following: (1) Increased efficiency of the producer owing to the use of power and improved machinery, (2) the increase in production of meat and milk per unit of feed consumed, (3) the demand for a higher standard of living on the part of the farm family, (4) rapid production shifts over large areas, and (5) the increased control of marketing functions by producers. These are the trends that must be reckoned with in the development of agricultural extension to meet the changing economic situations of the day. Along with these trends we must take into account (1) the declining price levels of farm products, (2) their decreased purchasing power, (3) the increased cost of farm machinery and equipment, (4) the great surplus production in many agricultural commodities, and (5) the general decline in birth rate and the consequent slowing up of increase in population and consumption as factors of importance in the consideration of the present situation and the development of a constructive program for agriculture.

#### Increased Efficiency from Use of Power and Improved Machinery

In view of the present large surplus production in many agricultural commodities, we probably are justified in giving first consideration to the trend toward highly increased efficiency in production owing to the use of power and improved machinery. This trend is greatly accentuated in importance by the presence of large world supplies of a number of these commodities. The increase

**DISTRIBUTION:** A copy of this circular has been sent to each extension director, State and assistant State county agent leader, State and assistant State home demonstration leader, State agricultural college library, and State experiment station library.

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in production per man and per acre has not been confined to the United States. In this matter we are dealing with a world-wide situation. The extension problem with respect to this trend, I believe, is that of giving to the individual farmer the fullest possible benefit of the increased efficiency which can be brought through the use of power and machinery. If agricultural extension is to render this service, it must have a background of knowledge and facts on the basis of which the most efficient use of this power and machinery can be made. It is the obligation of the extension service, therefore, to support the conduct of research that will give this basic information. With this information organized in a form for practical application, the State extension division can equip the county extension agent so that he will be able to aid his farmers effectively in making the most of this trend in increasing the farm income and improving the agricultural outlook of his county.

Two things stand out in obtaining the fullest development of the use of power and improved machinery. First, the size of the operating unit or the volume of business should be such as to use the investment in power and machinery to the fullest advantage. Second, the farming system or combination of enterprise recommended to a farmer should be that which will make for the largest amount of profit, taking into consideration the area in which he is located. If the county extension agent is equipped with reliable information on these two matters he need not hesitate to advise the farmer regarding investments in power or machinery tending materially to increase his efficiency. Unless the agent has definite facts both with respect to the size of the operative unit that is desirable and the combination or combinations of enterprises suited to the locality, he may easily lead the farmer into unwise investments in power and machinery.

In no section of the United States has the importance of the trend toward increased efficiency through the use of power and improved machinery been more in evidence than in the Southwest. Here large acreages of both wheat and cotton have been added. In this area these crops are being grown with the use of the most improved large-scale machinery known. This development has taken place in country which until recently was for the most part range land with very limited returns per acre. The introduction of power machinery has changed this area into a highly productive one.

Experience has shown that the lowest production costs are obtained for both cotton and wheat in this area where the acreage operated is up to the maximum capacity of the power and machinery used. In a comparatively simple cropping system like this, the two chief factors determining efficiency in production are the use of power machinery and the size of the acreage operated. In the older regions where a more varied cropping system prevails, the proper combination of enterprises has had a very marked influence on the degree of efficiency developed. In these areas the type of information required as a basis for sound recommendations for farmers requires much more detailed study and consideration than where a single cash crop prevails.





## Increased Efficiency in Production of Meat and Milk

The increase in production of meat and milk per unit of feed consumed is a trend that bears a direct relation to the improvement of the type of animal used and its feeding, housing, and care. The extension service has for many years maintained a carefully developed program for improved animal production directed to this very end. The continuation of this program would seem advisable, with such changes in detail as new research results dictate. Possibly, considerable added emphasis might be placed with profit on the improvement of the quality of all animal products, looking to maximum returns for the efforts put into production. The efforts now being made by many extension specialists in animal production to give greater emphasis to economic factors and profitable marketing deserve high commendation and should be encouraged.

## Demand for a Higher Standard of Living

The demand for higher standards of living on the farm is an inescapable trend. It may prove, indeed, to be the most helpful trend of all in stimulating the development of more highly efficient farming. It is difficult to appreciate fully the change in standards of living on the farm in the last 50, 30, or even 20 years. The relatively inexpensive horse and buggy furnished our transportation. The cost of maintaining country roads was comparatively little. When they became rutty or nearly impassable, there was less travel. Much of the food consumed on the farm, including meat, vegetables, and breads, was grown there. The water supply was pumped by hand or drawn from a well or spring. Kerosene or candles furnished illumination. Houses were heated with stoves. Washtubs, a washboard, and flatirons furnished the laundry equipment, and the work was done at home. A 1-room school and a low-salaried teacher kept down the cost and the effectiveness of education. All these things made for a comparatively low standard of living as compared with the cost of modern improvements connected with the life of farm families to-day.

Electricity supplying light, fuel, and power for the washing machine, the sewing machine, the vacuum cleaner, and the pump; canned goods, meats, baker's bread, and ready-made clothing from the city; furnace heat; the telephone; automobiles for business and pleasure; consolidated schools; improved roads; pleasure trips, the radio, and movies for recreation - these and many other features of modern farm life add to the mounting cost of living. Will the farm family willingly revert to the mode of life of the earlier day? Hardly. Rather will the attention of the farmer and of his family turn to ways and means of obtaining an income to meet the standard of living to which they have grown accustomed. And what is extension's reaction to this trend? Already, in many States both county agricultural and home demonstration agents are joining with the people of their communities in working on this problem of increasing the income to meet standards of living. It is a most hopeful development. Just as the farmer is learning to consider the management of his business over the whole year, the farm woman is giving her thought to the needs of her family and how the income available can best be budgeted to yield the most in health, comfort, and satisfaction. The farm income and how it can be augmented is becoming the focus of both the revision of plans for farming operations and for the conduct of the life of the farm home.



How can extension best serve the farm family in assisting it to get the most out of the income it has and to augment this income? It would appear that there are two rather definite lines along which such assistance can be given. One of these is to supply information that will make it possible to bring the farm operations up to a volume and efficiency that will provide the income desired. The other is to encourage the growing of as much of the family food and feed supply on the farm as practicable in order to hold down the cash outlay for things that the farm might just as well supply. Of the two, the first is the newer and much less developed field of extension activity. Here again there is urgent need of extensive research and of providing both agricultural and home demonstration agents with the knowledge which will enable them to deal effectively with the problem in their own locality. Studies must be made, facts must be developed, and both the farmer and the farm woman must be given this information in a clear and understandable form.

This is a broad field of service and one which the cooperative extension organization can not shirk. We should determine carefully what we need to know to render this service, arrange to have this knowledge developed where it is not now available, and then see to it that every extension agent has this information and knows how to present and apply it effectively. This demand of the farm family for a higher standard of living, then, will be a keen incentive to efficient farming, the orderly organization of the farm home, and a satisfying life. Without such constructive aid, this trend can easily be the breeder of increased dissatisfaction with farm life and a disintegrating influence in the agriculture of a county.

Encouragement by extension agents of the growing of the food and feed supply as far as possible on the farm is far from being a new activity. I can not commend too highly what extension workers have accomplished in this field. The desirability of this practice probably has never been so convincingly demonstrated as it has during the present drought. Wherever this idea had been established as part of the farm practice of the community, we find farm families in the most favorable position to meet the difficulties arising out of an unproductive year. Without question, the farm family that has learned to be self-sustaining as to its food supply is in a far stronger position to meet any or all forms of adversity than is one with a large out-of-pocket outlay. Present economic conditions coupled with this urge for a high standard of living provide a strong incentive for the expansion of this movement. Both county agricultural and home demonstration agents can do no wiser thing at the present time than to urge vigorously and constantly a "live-at-home" program.

#### Rapid Production Shifts Over Large Areas

The relatively rapid shifts in production over wide agricultural areas that have taken place in recent years and the changes in the economic situation that bring them about afford to agricultural extension its keenest challenge to effort in the economic field. Here, indeed, is a field for intelligent and exhaustive research on the part of agricultural investigators and an opportunity on the part of extension workers for the exercise of unusual judgment and acumen in applying the results to local conditions.





Typical of the general shifts in production are the growing of less wheat and more corn in the Corn Belt, of less corn and more cotton in the South, and of greatly expanded production of cotton in Texas and Oklahoma, of wheat in Kansas, Oklahoma, and Texas, and of fruit and vegetables in California and Florida. We note, too, the trend toward the abandonment of marginal lands in some of the older agricultural areas and of cut-over lands of low fertility.

When the number of farms abandoned in the county becomes numerous, because they can no longer provide a satisfactory living, the extension service is presented with one of its most difficult and hopeless problems, that of attempting to serve the farmer who, because of the sheer force of economic circumstances, can not hope to win out in his battle for a competence. In some localities definite steps have been taken to place under governmental supervision areas in which the farms are largely abandoned and to include them in a state-wide forestation program. Such action, of course, has eliminated the individual farmer from the situation. Whatever extension aid is given goes to the State or county government dealing with the problem. In this determination by the State or county of the suitability of such areas for inclusion in forestation projects the services of extension specialists have proved most helpful.

Extension, however, is primarily concerned with the farmer and the farm family as occupants of land rather than with the land itself. What then is extension's relation to the farmer and the farm family in that area where the abandonment of farms is pronounced? Plainly, it is extension's first duty to aid in preventing, if possible, the further occupation of such unproductive and unprofitable lands by new farmers. The cooperation of the county government, of interested business men and citizens of the county, should be sought with the end in view of eliminating the sale of such lands for farming purposes to strangers from other sections lacking knowledge of the local agricultural situation. Extension, too, has an obligation to the young farmer anxious to obtain a foothold on a farm of his own, who believes that by hard work and some years of close economy he can master the situation, own his farm, and provide his family with a satisfactory living. The county extension agent has few experiences more unsatisfactory than that of being called in to give information and assistance to a man who has located on a farm on which there is no hope that he can succeed, regardless of the instruction he may have or the efforts he may make. The giving of such assistance is wasted effort, yet it is assistance that the extension agent in his capacity as a public servant must render or attempt to render. The county extension agent needs the support of his State extension division in working out a general policy looking to the new occupation of such land, prevention of which will protect him against the necessity of giving a service both unprofitable to himself and to the farmer demanding it.



## Increased Control of Marketing Functions by Producers

The trend toward increased control of marketing functions by producers has been marked by a steady growth in the number and size of cooperative-marketing organizations. These organizations included in their reported membership more than one-third of the farmers of the United States prior to the passage of the agricultural-marketing act in 1929. Needless to say, the passage of this act and the early announcement of the Federal Farm Board that it would extend financial aid to farmers only through the medium of cooperative organizations served greatly to stimulate these organizations. They proceeded where necessary to reorganize, to meet the requirements of the Federal Farm Board, to enlarge their facilities for the storage and handling of farm products, and to join in forming regional and national organizations with other associations handling the same product or products. In all this activity, the cooperative extension service has been active in acquainting farmers with the terms of the agricultural-marketing act and the benefits and limitations of cooperative-marketing associations. Where such associations have been organized or reorganized and found themselves in need of aid in working out their business operations, the extension service, in so far as was possible, has put them in touch with the information needed.

Without question the creation of the Farm Board and its support of the cooperative-marketing movement have greatly stimulated the trend toward the control of marketing functions by producers. It seems certain that agricultural extension will go forward with this greatly accelerated movement, continuing to give every encouragement possible to the farmer in his effort to cooperate with his fellow producers in improving marketing facilities. Extension effort in assisting farmers to put on the market products high in quality, properly graded, and in a condition calculated to command the higher market quotations will continue undiminished. Vigorous effort may be looked for, also, from extension agents in the effort to acquaint producers with what they can expect from membership in a cooperative association and the obligations which they must meet as members if the association is to be a success.

It would seem that a heavy responsibility lies with the cooperative extension service in every State to develop all possible information on the successful operation of cooperative associations and on the several national organizations now functioning in accord with the terms of the agricultural-marketing act. It would seem to be the further responsibility of the extension service to give county extension agents this information when it is available and to aid them in presenting to their farmers in an intelligent and helpful way the essential facts on the cooperative movement and on the organization and operation of national, regional, and local set-up of associations concerned with the commodities in which they are interested. The trend of years toward the control of marketing functions by the producers has, under the stimulation of the agricultural-marketing act, gone rapidly forward in the coordination of local associations into national and regional organizations commanding power and respect in the channels of trade. This gain must not be lessened by weakness in the local commodity units. To assist his farmers to accomplish their part in the local cooperative association successfully and thus enable them to take full advantage of the existence of the regional and national organizations would seem to be the imperative duty of every county extension agent. The time to support the cooperative movement and help it





to find itself as a permanent and highly successful agency for the profitable marketing of agricultural products is here and now. In this effort extension must not lag.

### How Is Extension Meeting the Situation?

Under the stimulus of the present trying economic situation on the farms of the United States, the cooperative extension service is rapidly expanding its efforts in the economic field. Extension administrators generally are organizing their forces to give more definite economic service, specialists in economic fields are being added to organize available facts and to aid county extension agents in their presentation, specialists in production are preparing their information in more definite relation to market requirements, and a coordination of extension effort in the light of the facts of the economic situation is under way in some degree in every State.

It is realized that in advising farmers as to production adjustments and the combination of enterprises suited to their localities, county extension agents must have definite and accurate information. The program for the county that the agent supports and the adjustments that he suggests must be sound. If either the program or the adjustments suggested prove faulty it is easily possible that the agent will lose his job and the extension service in the State will be weakened to that degree. In broadening its work in the economic field, therefore, agricultural extension takes a hazard as well as an opportunity for greatly enlarged service. It is wise to fortify ourselves strongly as we go and to see that no program or recommendation is given to the county agent for presentation until we are sure that it will stand up under the pressure of the economic forces of the future.

I commend highly the progress which is being made in widening the use of outlook material, its interpretations from a State viewpoint by State extension divisions, and the assistance that is being given to agents in the counties in adapting such information to their localities. The development of this outlook material for local use and the enlarged programs for commodity studies, farm-management studies, and the keeping of enterprise records is furnishing a fund of information that is daily enabling the county extension agent to increase his usefulness in advising the farmers of his county on desirable shifts from less productive to more productive crops or enterprises and on increasing their efficiency in the profitable production of such crops.

As most of the States did not have funds available during the current fiscal year to increase their staff of economic extension workers, a request was presented to the Federal Congress last spring for a special appropriation of \$1,000,000 for allotment to the States, it having become apparent that the new Capper-Ketchum Bill could not pass at the second session of the 71st Congress. This request had the strong support of the President, the Director of the Bureau of the Budget, and the Federal Farm Board. The need for this additional appropriation was based on (1) the desirability of increasing materially the economic extension work of the States, (2) the employment of additional county workers, and (3) the employment of additional specialists in fields other than economics. The need for economic workers was particularly emphasized. The appropriation item, about which many members of Congress no doubt



heard from home, was agreed to without opposition. The money was allotted to the States, and almost without exception a considerable part of it is budgeted to be used for economic extension work. Naturally considerable time has been required to find the right people for these new positions and to get them under way, but very material expansion of economic extension forces is taking place. The economic extension staff now consists of 225 full-time or part-time workers, an increase of 85 during the current year.

Concurrently with the appropriation for additional work in the States, the department received an increase of \$58,000 in its appropriation for extension work which again was primarily for the purpose of expansion in the economic field. For the past several months Dr. C. E. Ladd of the New York Extension Service has been making a study for us of the economic extension work in the States and the proper organization of an economic extension staff in the department. Although plans for this staff are not yet complete, it will be organized cooperatively by the Bureau of Agricultural Economics and the Extension Service with the man in charge of the division having the rank of assistant chief of bureau. Civil service examinations were offered during the summer for several grades of economic extension workers, and a register of eligibles is now available, from which it is expected that appointments will be made in the near future. These men will give all possible aid in strengthening and correlating the economic extension work of the States. They will engage in all fields of economic extension work, studying the research work of the Bureau of Agricultural Economics and putting it in form for use by extension workers. Naturally they will work closely, not only with the Bureau of Agricultural Economics and Extension Service, but with the Federal Farm Board. With this increased staff on the part of the Federal Department strengthening and correlating the work of the economic extension workers in the States, we should be able greatly to increase the effectiveness of economic work.





